

## ABSTRACT OF THE DISCLOSURE

A system for controlling exhaust emissions produced by an internal combustion engine includes an engine controller having an emission manager configured to produce a base emission level cap command, corresponding to a maximum allowable emission level of the engine, as a function of at least altitude and ambient temperature. The emission manager may also include one or more auxiliary emission control devices (AECDs), and the emission manager is further operable in such cases to determine a maximum allowable emission level associated with each active AECD. A final emission level cap command is determined as a function of the base emission level cap command and the maximum allowable emission level associated with each active AECD. The emission manager is further operable to produce a protection state data structure that includes information relating to the operational status of each AECD.